

REMARKS

Reconsideration of the application is respectfully requested.

The rejections of claims 28, 29, 32-34, 36, 41, and 43 under 35 USC §102(b) and of claims 30, 35, and 42 under 35 USC §103(a), both based on U.S. Patent No. 4,922,483 (Kobayashi), are respectfully traversed on the grounds that:

- a. Independent claim 33 has been amended to include the limitations of claims 36 and 37, claim 37 having been indicated as directed to **allowable subject matter** in item 7 on page 2 of the Official Action;
- b. Independent claim 28 has also been amended to include the limitations of claims 36 and 37; and
- c. Independent claims 28 and 33 include numerous additional recitations of subject matter not disclosed in the Kobayashi patent.

As noted in the previous response, the Kobayashi patent is directed to modulation of a PCM music signals for FM (frequency modulated) transmission over a cable television system, and not to synthesis of a voice signal by digital sampling over multiple channels, time division multiplexing, and adjustment of the *magnitude* of the resulting signal prior to conversion to analog, as claimed. While Kobayashi uses the term “modulation,” the modulation is not pulse **width** modulation, as claimed, but rather pulse **code** modulation, and there is no suggestion of using such pulse code modulation to adjust the magnitude of a signal and convert the signal to an analog output signal, also as claimed, much less doing so with multiple digital voice signals. Instead of converting a multi-channel time divisionally sampled signal to an analog voice signal, as claimed, Kobayashi generates a frequency modulated PCM signal suitable for cable TV transmission.

Because of the addition of allowable subject matter to each of the independent claims, because the Kobayashi patent is directed to modulation by a carrier for transmission rather than

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to adjustment of a voice signal output using pulse width modulation, and because the Kobayashi patent also fails to teach voice signal generation over multiple channels, time division multiplexing, conversion to analog, and other features of the invention¹, all as positively recited in independent claims 28 and 33, it is respectfully submitted that the rejection is improper and withdrawal of the rejection is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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¹ In addition, the Kobayashi patent fails to suggest the following claimed distinctions, discussed in detail in the previous rejection:

- a. it uses a different source (pulse modulated music blocks *versus* digital voice signals corresponding to one channel each, as claimed);
- b. a different type of time division multiplexing (combination of groups of four "blocks" *versus* sampling of digital signals under control of a channel selecting signal to generate a multi-channel sampled signal, as claimed), and
- c. a completely different output (a frequency modulated signal consisting of time divisionally multiplexed blocks of PCM signals *versus* the claimed analog voice signal, as claimed).